

Serial No. **10/772,337**

Docket No. **IPS-0017**

Amendment dated **March 1, 2010**

Reply to Office Action dated **December 1, 2009**

REMARKS/ARGUMENTS

Claims 18, 21 and 32-37 are pending in this application. By this Amendment, claim 18 is amended, claim 37 is added, and claims 20 and 30 are cancelled without prejudice or disclaimer. Support for the claims can be found throughout the specification, including the original claims and the drawings.

Examiner Yenke is thanked for the courtesies extended to Applicant's representative during the interview conducted in December 23, 2009. The substance of the interview, including any agreements reached, is reflected in the above amendments and the following remarks. Withdrawal of the rejections is thus respectfully requested.

The Office Action rejects claims 18, 20, 21, 30 and 32-36 over Hayashi and Kahn in view of Cohen-Solal. The rejection is respectfully traversed. Claims 20 and 30 have been cancelled. The rejection, in so far as it applies to claims 18, 21 and 32-36, is respectfully traversed.

Independent claim 18 is directed to a video display appliance, including a display screen, a processor that generates a display signal which is output to the display screen, wherein the display signal causes the display screen to show a main picture and a sub-picture that is superimposed on the main picture, and a key input unit coupled to the processor, wherein a user can manipulate buttons on the key input unit to instruct the processor to take certain actions. The video display appliance also includes an on-screen display (OSD) generator, coupled to the processor, which causes the processor to generate a sub-picture OSD adjustment menu, wherein the sub-picture OSD adjustment menu includes a function control display section and a level

adjustment display section, wherein the level adjustment display section displays at least two arrows, each of the at least two arrows being oriented in one of a left, right, upward or downward direction, and wherein the user can manipulate the at least two arrows displayed by the level adjustment display section to select options on the sub-picture OSD adjustment menu to adjust a size, a position, and at least one of a brightness or contrast of the sub-picture independent of the main picture, wherein an amount of change to a selected characteristic is selected by the user's manipulation of the at least two arrows displayed in the level adjustment display section, and the processor displays the amount of change of the selected characteristic of the sub-picture as the user manipulates the at least two arrows.

As discussed during the interview, Hayashi, Kahn and Cohen-Solal, either alone or in combination, neither disclose nor suggest the features recited in independent claim 18, or the claimed combination of features.

Hayashi discloses in Figure 1 (referred to in the Office Action) a television receiver in which a broadcast satellite signal is received, processed by a video processing circuit 33 and an audio processing circuit 37, and output through a CRT 36 and a speaker 38. A picture-in-picture (PIP) processing circuit 34 may also process a signal that is output through the CRT 36 if the PIP function is enabled. Infrared signals are received by a receiver 47 from a remote controller 60 (see Figure 3 of Hayashi) for program and function selection.

The remote controller 60 includes a menu switch 61 that signals a display controller 45 to display a main menu on a sub-screen 36b of the main screen 36a. The main menu includes

various display setting parameters 36b₁-36b₁₇ as shown in Figures 5 and 6 of Hayashi. In particular, when the display setting parameter 36b₁ associated with the sub-screen PIP operation is selected, two sub-screens 36b and 36c are displayed at the same time on the lower part of the main screen 36a, as shown in Figure 4c of Hayashi. A video signal is displayed on the sub-screen 36c, while the sub-screen menu shown in Figure 6a of Hayashi is displayed on the sub-screen 36b, allowing the user to set various parameters 36b₁₁-36b₁₇ for the sub-screen 36c.

Independent claim 18 recites a sub-picture OSD adjustment menu that includes a function control display section and a level adjustment display section. In contrast, Hayashi's sub-screen 36b displays the sub-screen parameters 36b₁₁-36b₁₇ in a single section encompassing essentially all of the sub-screen 36b. Thus, Hayashi neither discloses nor suggests a function control display section and a level adjustment display section as recited in independent claim 18.

Independent claim 18 also recites that the level adjustment display section displays at least two arrows. As acknowledged in the Office Action, Hayashi neither discloses nor suggests the claimed at least two arrows, let alone the at least two arrows being oriented in one of a left, right, upward or downward direction, as recited in independent claim 18.

Independent claim 18 also recites that the user can manipulate the at least two arrows displayed by the level adjustment display section to select options on the sub-picture OSD adjustment menu to adjust a size, a position, and at least one of a brightness or contrast of the sub-picture independent of the main picture. Even if such arrows were to be incorporated into the sub-screen display menu disclosed by Hayashi, Hayashi only discloses that a position and a

screen size selection may be made from the menu shown in Figure 6a. Hayashi neither discloses nor suggests that such arrows could or should be used with the sub-screen display menu to adjust a brightness or contrast of the signal displayed in the sub-screen 36c. Rather, it appears brightness and contrast of a sub-screen of a CRT could not be controlled separately from brightness and contrast of a main screen of a CRT. Thus, Hayashi neither discloses nor suggests adjusting a size, a position, a brightness or contrast of the sub-picture, as recited in independent claim 18.

Independent claim 18 also recites that an amount of change to a selected characteristic is selected by the user's manipulation of the at least two arrows displayed in the level adjustment display section. Even if such arrows were to be incorporated into the sub-screen display menu disclosed by Hayashi, it appears that Hayashi's options are limited to specific, previously set, position(s) and size(s) for the sub-screen 36c, and selected by toggling between the previously set position(s) and size(s). Thus, Hayashi neither discloses nor suggests such features.

Independent claim 18 also recites that the processor displays the amount of change of the selected characteristic of the sub-picture as the user manipulates the at least two arrows. Even if such arrows were to be incorporated into the sub-screen display menu disclosed by Hayashi, Hayashi neither discloses nor suggests any means by which an amount of change could or should be displayed real time as the user manipulates such arrows. Thus, Hayashi neither discloses nor suggests such features.

Kahn is merely cited as allegedly teaching the claimed at least two arrows, and for at least this reason fails to overcome the deficiencies of Hayashi set forth above. Further, Kahn discloses an adjustable video display window for a digital TV 25 that communicates with a user interface 60 that receives manual input and sends corresponding signals to a main data processor 40 of the TV 25. The TV 25 can display in vertical letterbox or letterbox modes including an active area 2 bordered on opposite sides by adjustable windows 10. The size of the windows 10 may be adjusted (i.e., increased) so that artifacts 5 at the edges of the active area 2 are not visible to the viewer, but obscured or masked by the adjustable windows 10. A portion of the user interface may include buttons A-D to make the windows 10 larger or smaller in a particular direction. The buttons A-D are directed to the adjustment of the size of the windows 10 on the main screen of the TV 25, and not to any type of sub-screen displayed on the main screen.

The buttons A-D shown in Figure 5 of Kahn merely allow for horizontal/vertical adjustment of the size of the windows 10. Kahn neither discloses nor suggests that the buttons A-d could or should be replaced by at least two arrows oriented in one of a left, right, upward or downward direction, as recited in independent claim 18. Further, Kahn neither discloses nor suggests that the buttons A-D could or should be adapted to adjust a position, and at least one of a brightness or contrast independent of the main screen, as recited in independent claim 18. Further, Kahn neither discloses nor suggests that a processor displays an amount of change in a selected characteristic (size, position, brightness, contrast) of the sub-picture as the user manipulates such arrows, as recited in independent claim 18.

Additionally, like Hayashi, Kahn neither discloses nor suggests a sub-picture OSD adjustment menu that includes a function control display section and a level adjustment display section, as recited in independent claim 18.

For these additional reasons, Kahn fails to overcome the deficiencies of Hayashi as set forth above.

The Office Action cites Cohen-Solal as allegedly teaching the use of arrows 137A-137D to manually position a PIP image 210A on a display 110 at initial operation, and for at least this reason fails to overcome the deficiencies of Hayashi and Kahn set forth above. Further, Cohen-Solal discloses a system 100 having an active PIP mode in which a PIP image 210A is automatically and continuously repositioned as necessary with respect to an underlying primary image 210B when a processor 120 determines that the PIP image 210A is obscuring the primary image 210B. Cohen-Solal neither discloses nor suggests that the arrows 137A-137D could or should be adapted to adjust a size, and at least one of a brightness or contrast of the sub-screen independent of the main screen, as recited in independent claim 18.

During the interview, the Examiner asserted that Cohen-Solal discloses that transparency of the PIP image 210A may be changed (see Cohen-Solal's Abstract). However, after a detailed review of Cohen-Solal's disclosure, it is respectfully submitted that Cohen-Solal provides no support for any adjustment of transparency, or of brightness or contrast, of the PIP image 210A, let alone any adjustment of such features independent of the primary image 210B. In each of Cohen-Solal's embodiments, the PIP image 210A is sized and/or repositioned based on an

analysis of the incoming data stream of the primary image 210B, but Cohen-Solal makes absolutely no disclosure of any adjustment in contrast and/or brightness of the PIP image 210A.

Further, Cohen-Solal neither discloses nor suggests that a processor displays an amount of change in a selected characteristic (size, position, brightness, contrast) of the sub-picture as the user manipulates such arrows, as recited in independent claim 18.

Additionally, like Hayashi and Kahn, Cohen-Solal neither discloses nor suggests a sub-picture OSD adjustment menu that includes a function control display section and a level adjustment display section, as recited in independent claim 18.

For these additional reasons, Cohen-Solal fails to overcome the deficiencies of Hayashi and Kahn.

Accordingly, it is respectfully submitted that independent claim 18 is allowable over the applied combination, and thus the rejection of independent claim 18 under 35 U.S.C. §103(a) over Hayashi, Kahn and Cohen-Solal should be withdrawn. Dependent claims 21, 30 and 32-36 are allowable over Hayashi, Kahn and Cohen-Solal at least for the reasons set forth above with respect to independent claim 18, from which they depend, as well as for their added features.

New claim 37 is added to the application. It is respectfully submitted that new claim 37 meets the requirements of 35 U.S.C. §112, and is allowable over the applied prior art at least for the reasons set forth above with respect to independent claim 18, from which it depends, as well as for its added features.

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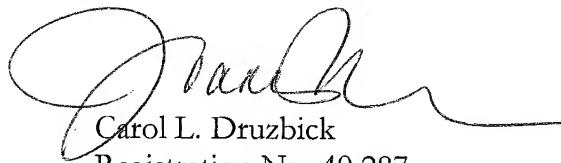
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CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned, **Joanna K. Mason**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
KED & ASSOCIATES, LLP



Carol L. Druzbeck
Registration No. 40,287
Joanna K. Mason
Registration No. 56,408

P.O. Box 221200
Chantilly, Virginia 20153-1200
703 766-3777

Date: March 1, 2010

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Please direct all correspondence to Customer Number 34610